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REPORT OF TAR AND NICOTINE CONTENT OF
THE SMOKE OF 68 VARIETIES OF CIGARETTES
June 11, 1968

The Federal Trade Commission's laboratory has determined the tar (dry particulate matter) and total alkaloid (reported as nicotine) content of 68 additional varieties of cigarettes. The laboratory utilized the Cambridge filter method with the following specifications as set forth in the Commission's announcement of July 31, 1967:

1. Smoke cigarettes to a 23 mm. butt length, or to the length of the filter and overwrap plus 3 mm. if in excess of 23 mm.,
2. Base results on a test of 100 cigarettes per brand, or type,
3. Cigarettes to be tested will be selected on a random basis, as opposed to "weight selection",
4. Determine particulate matter on a "dry" basis employing the gas chromatography method published by C. H. Sloan and B. J. Sublett in Tobacco Science 9, page 70, 1965, as modified by F. J. Schultz' and A. W. Spears' report published in Tobacco Vol. 162, No. 24, page 32, dated June 17, 1966, to determine the moisture content,
5. Determine and report the "tar" content after subtracting moisture and alkaloids (as Nicotine) from particulate matter.

The samples used were obtained by attempting to purchase two packages of each variety of cigarettes in each of 50 geographic locations throughout the country during January 1968. Twenty-five of the varieties of cigarettes tested were not available in each of the 50 geographic locations; and in these cases one or more additional packages of cigarettes were purchased in those geographic locations where the respective varieties were available. The samples utilized in the tests were representative of the 68 varieties of cigarettes as available throughout the country at the time of purchase.

In the interest of scientific accuracy the tar content is reported to the nearest 1/10 milligram and the nicotine content to the nearest 1/100 milligram, each with appropriate statistical values.

The results of this analytical work are shown in the accompanying table.

¹Tar³ and Nicotine⁴ Content of Sixty-eight (68) Varieties of Domestic Cigarettes
(shown in alphabetical order)

Name	Type ¹	Average weight	Butt length ²	TPM dry ³	Nicotine ⁴
Alpine	F, M, SP 85 mm	1.0520	26-28 mm	21.3 ± 0.4	1.24 ± 0.06
Belair	F, M, SP 85 mm	0.9940	26-29 mm	21.6 ± 0.4	1.42 ± 0.08
Benson & Hedges	F, HWP 70 mm	0.8827	23 mm	20.6 ± 0.5	1.15 ± 0.07
Benson & Hedges	F, HWP 85 mm	1.0713	26-28 mm	19.9 ± 0.7	1.30 ± 0.09
Benson & Hedges	F, SP 100 mm	1.2050	30-34 mm	22.0 ± 1.0	1.34 ± 0.09
Benson & Hedges	F, M, SP 100 mm	1.2034	30-34 mm	22.4 ± 0.5	1.40 ± 0.06
Brandon	NF, SP 85 mm	1.0716	23 mm	32.5 ± 0.9	1.64 ± 0.12
Bull Durham	F, SP 85 mm	1.2335	26-28 mm	30.0 ± 0.5	1.58 ± 0.08
Camel	F, M, SP 85 mm	1.0646	27-27.5 mm	18.2 ± 0.6	1.14 ± 0.08
Cavalier	NF, HP 80 mm	1.0498	23 mm	25.4 ± 0.8	1.36 ± 0.05
Century	F, SP 100 mm	1.2506	27-34 mm	24.6 ± 0.8	1.31 ± 0.07
Chesterfield	F, SP 101 mm	1.2765	26-31 mm	23.1 ± 0.5	1.17 ± 0.07
Colony	F, SP 100 mm	1.2334	26-29 mm	28.1 ± 0.8	1.37 ± 0.09
Colony	F, M, SP 100 mm	1.2181	25-29 mm	26.3 ± 0.4	1.23 ± 0.08
Coupon	NF, SP 70 mm	0.9124	23 mm	20.3 ± 0.6	1.43 ± 0.08
Devon	F, M, SP 85 mm	1.2496	27-29 mm	21.3 ± 0.8	1.05 ± 0.07
Domino	NF, SP 85 mm	1.2514	23 mm	23.7 ± 0.5	0.91 ± 0.05
Domino	F, SP 85 mm	1.1674	23-25 mm	22.4 ± 1.0	0.79 ± 0.04
Dover Longs	F, SP 100 mm	1.1968	28.5-32 mm	23.8 ± 0.5	1.47 ± 0.08
DuMaurier	F, HWP 85 mm	1.0476	27-28 mm	22.4 ± 0.5	1.37 ± 0.11
English Ovals	NF, HWP 70 mm	0.9807	23 mm	25.5 ± 1.0	1.55 ± 0.08
English Ovals	NF, HWP 85 mm	1.2175	23 mm	31.7 ± 1.3	1.86 ± 0.10
Fatima	NF, SP 85 mm	1.2441	23 mm	31.2 ± 0.8	1.51 ± 0.09
Frappe	F, M, SP 85 mm	1.1352	25-28.5 mm	11.2 ± 1.2	0.37 ± 0.05
Galaxy	F, SP 85 mm	1.1513	26-28 mm	21.1 ± 0.6	1.27 ± 0.08
Gauloises	NF, SP 70 mm	1.0874	23 mm	23.7 ± 0.6	1.16 ± 0.07
Gauloises	F, SP 70 mm	1.0591	23 mm	21.3 ± 0.9	1.08 ± 0.04
Half & Half	F, SP 85 mm	1.1560	25-29 mm	27.3 ± 0.6	1.64 ± 0.09
Helmar	F, HP 80 mm	1.0555	24-25 mm	23.3 ± 0.6	1.30 ± 0.06
Herbert Tarayton	NF, SP 85 mm	1.1437	23 mm	32.8 ± 1.0	1.52 ± 0.11
Holiday	NF, SP 85 mm	1.2341	23 mm	30.2 ± 1.0	1.49 ± 0.11
Holiday	F, SP 85 mm	1.2238	23-25 mm	28.8 ± 1.3	1.52 ± 0.10
Home Run	NF, SP 70 mm	0.9071	23 mm	19.8 ± 0.8	1.35 ± 0.10
Kent	F, SP 70 mm	0.9028	23-25 mm	14.8 ± 0.6	0.80 ± 0.05
Kent	F, HP 80 mm	1.0192	24-28 mm	17.5 ± 0.3	0.88 ± 0.06
Lark	F, SP 85 mm	1.2047	27-29 mm	19.3 ± 1.1	1.01 ± 0.05
Life	F, SP 85 mm	1.0076	32-35 mm	11.5 ± 0.4	0.66 ± 0.03
Mapleton	NF, SP 70 mm	0.9927	23 mm	21.7 ± 0.6	0.75 ± 0.06
Mapleton	F, SP 85 mm	1.0772	27-28.5 mm	20.9 ± 0.6	0.76 ± 0.05
Marlboro	F, HP 100 mm	1.1766	30-31 mm	22.4 ± 0.6	1.26 ± 0.05
Marvells	F, M, SP 85 mm	1.1192	27.5-29 mm	5.2 ± 0.5	0.19 ± 0.01
Montclair	F, M, SP 85 mm	1.0626	26-29 mm	11.2 ± 0.5	0.62 ± 0.03
Murad	NF, HWP 70 mm	1.0690	23 mm	23.7 ± 0.8	0.86 ± 0.04
Newport	F, M, HP 80 mm	1.0034	24-26 mm	21.2 ± 0.7	1.17 ± 0.08
Newport	F, M, SP 85 mm	1.0036	26-28 mm	21.7 ± 0.5	1.26 ± 0.07
Newport	F, M, SP 100 mm	1.2043	26-28 mm	22.7 ± 0.6	1.30 ± 0.06
Oasis	F, M, SP 85 mm	1.0845	23-28 mm	21.0 ± 0.4	1.06 ± 0.05
Old Gold	NF, SP 70 mm	0.9230	23 mm	21.0 ± 0.6	1.14 ± 0.08
Old Gold	NF, SP 85 mm	1.0991	23 mm	27.0 ± 0.7	1.52 ± 0.05
Old Gold	F, SP 85 mm	1.0373	26-28 mm	20.1 ± 0.7	0.97 ± 0.06
Omar	NF, SP 70 mm	1.0096	23 mm	25.1 ± 1.0	1.16 ± 0.09
Picayune	NF, SP 70 mm	0.9093	23 mm	20.4 ± 0.7	1.34 ± 0.07
Piedmont	NF, SP 70 mm	1.0201	23 mm	24.0 ± 0.8	1.27 ± 0.09
Players	NF, HWP 70 mm	1.1230	23 mm	31.5 ± 0.6	1.67 ± 0.09
Silva Thins	F, SP 100 mm	1.0652	32-35 mm	15.3 ± 0.6	0.78 ± 0.04
Spring	F, M, SP 100 mm	1.2135	26.5-34.5 mm	23.1 ± 0.6	1.17 ± 0.06
Stratford	NF, SP 85 mm	1.2604	23 mm	22.1 ± 0.4	0.73 ± 0.04
Stratford	F, SP 85 mm	1.0979	27.5-29 mm	19.6 ± 0.5	0.70 ± 0.03
Stratford	F, M, SP 85 mm	1.0074	27-29 mm	20.0 ± 0.4	0.65 ± 0.05
Sweet Caporal	F, SP 85 mm	1.0797	26.5-28 mm	23.2 ± 1.1	1.16 ± 0.07
Tempo	F, SP 85 mm	1.1020	26-29 mm	16.7 ± 0.4	0.71 ± 0.04
Tryon	F, SP 85 mm	1.1895	27.5-28.5 mm	14.2 ± 0.8	0.83 ± 0.05
Tryon	F, M, SP 85 mm	1.1344	27-29 mm	10.8 ± 0.8	0.66 ± 0.04
Vogue (colors)	F, HWP 85 mm	1.1446	22.5-24 mm	12.6 ± 0.9	0.36 ± 0.04
Vogue (black)	F, HWP 85 mm	1.1615	23-24 mm	19.0 ± 1.4	0.55 ± 0.06
Wings	F, SP 85 mm	1.0382	26-28 mm	21.9 ± 0.7	1.45 ± 0.09
York	F, SP 100 mm	1.2496	26-28 mm	24.8 ± 0.9	1.38 ± 0.06
Yukon	F, M, SP 85 mm	1.1313	23-26 mm	19.8 ± 0.4	0.73 ± 0.03

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- ¹ F- filter; NF- non-filter; M- menthol; HP- hard pack; SP- soft pack; HWP- hard wide pack; mm- millimeters
- ² Range used for butt length because of variance of overwrap
- ³ TPM dry (tar)- total particulate matter less nicotine and water
- ⁴ total alkaloids reported as nicotine
- ⁵ tolerance shown is two (2) standard deviation of the mean